## (19) World Intellectual Property Organization

International Bureau



## 

(43) International Publication Date 13 October 2005 (13.10.2005)

**PCT** 

## (10) International Publication Number WO 2005/095180 A1

(51) International Patent Classification<sup>7</sup>: G10K 11/175, F16F 15/02

B62D 7/22,

(21) International Application Number:

PCT/SE2005/000441

(22) International Filing Date: 23 March 2005 (23.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 0400878-5

1 April 2004 (01.04.2004) SE

- (71) Applicant (for all designated States except US): A2 ACOUSTICS AB [SE/SE]; Westmansgatan 47, S-582 16 Linköping (SE).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): GUSTAVSSON, Mats [SE/SE]; Grännagatan 10, S-252 50 Helsingborg (SE).
- (74) Agents: BJERKÉNS PATENTBYRA KB et al.; Östermalmsg.58, S-114 50 Stockholm (SE).

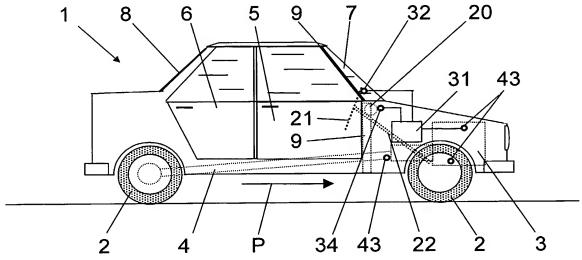
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## **Published:**

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A VIBRATION CONTROL DEVICE PROVIDING A DESIRED VIBRATION CHARACTER IN A STEERING WHEEL OF A VEHICLE



(57) Abstract: The invention refers to a device for a motor vehicle and a motor vehicle. The motor vehicle (1) includes a support structure, which is mounted in the vehicle, and a steering wheel (21), which is rotatably connected to the support structure. The device includes a control unit (31) and a sensor device (32), which is connected to the control unit. The sensor device is adapted to sense vibrations in the steering wheel and to provide a sensor signal related to the sensed vibrations. An actuator device (34) is connected to the control unit and adapted to influence vibrations in the vehicle. The control unit is adapted to control the actuator device, with regard to the sensor signal, to act on the vehicle in such a way that a desired vibration character in the steering wheel is obtained.



